



## UNITED STATES PATENT AND TRADEMARK OFFICE



DATE MAILED: 09/25/2003

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER, FOR PATENTS P.O. BOLLEY AND ADDRESS OF TAXABLE PROPERTY ADDRESS OF TAXABLE PROPERTY AND ADDRESS OF TAXABLE PROPERTY AND ADDRESS OF TAXABLE PROPERTY ADDRESS OF TAXAB

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,021	07/20/2000	Janusz Rajski	1011-54375	3823
75	90 09/25/2003			
KLARQUIST SPARKMAN CAMPBELL LEIGH & WHINSTON, LLP One World Trade Center, Suite 1600 121 S.W. Salmon Street Portland, OR 97204-2988			EXAMINER	
			CHUNG, PHUNG M	
			ART UNIT	PAPER NUMBER
			2133	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/620,021	RAJSKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Phung My Chung	2133				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed  ys will be considered timely. In the mailing date of this communication.  ED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	·					
2a) This action is <b>FINAL</b> . 2b) ☑ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims  4)⊠ Claim(s) 1-60 is/are pending in the application						
<ul> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) 30-33 and 44-49 is/are allowed.</li> </ul>						
6) Claim(s) <u>1,2,11-14,16-22,29,34-39,50-53 and</u>	55-60 is/are rejected					
7) Claim(s) 3-10,15,23-28,40-43,54 and 58 is/are						
8) Claim(s) are subject to restriction and/o						
Application Papers	, olosion roquironi					
9)☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accep	oted or b) objected to by the Exa	miner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
<ul> <li>a)  The translation of the foreign language pro</li> <li>15)  Acknowledgment is made of a claim for domest</li> </ul>						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1</li> </ol>	5) Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)				

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-2, 11-14, 16-22, 29, 34-39, 50-53 and 55-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajski et al (Test Data Decompression for Multiple Scan Designs with Boundary Scan) in view of Craft (6,026,508).

As per claims 19-22, 29, 50-53, and 55, Rajski et al disclose the invention substantially as claimed, comprising:

- a compressor means for providing a compressed test pattern of bits;
- a decompressor means for decompressing the compressed test pattern into a decompressed test pattern of bits; and

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a means for applying the decompressed test pattern to scan chains of a circuit under test. (See abstract, page 1188 and page 1192, col. 2, lines 10-20). Rajski et al do not specifically disclose decompressing the compressed test pattern as the compressed test pattern is being provided. However, Craft discloses a decompressor for decompressing a compressed data into decompressed data as the compressed data is being provided. (See col. 3, line 64 to col. 4, line 7). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to incorporate the decompressor for decompressing the compressed data as the compressed data is being provided to ensure that compression and decompression are all carried out with highest integrity.

As per claims 34-35, these claims are also rejected under the same rationale as set forth in the system claims 19-22, 29, 50-53 and 55. Further, Craft discloses a storage device (11) adapted to store a set of compressed test patterns of bits.

As per claims 1-2, 11-14, 16-18, 36-39 and 56-57 and 59-60, these method claims are also rejected under the same rationale as set forth in the system claims 19-22, 29, 34-35, 50-53, and 55.

- 41-43
- 3. Claims 3-10, 15, 23-28, 40-43, 54, and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 4. As per claims 30-33, and 44-49 are allowabled.

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5. Applicant's arguments with respect to claims 1-47 have been considered but are moot in

view of the new ground(s) of rejection.

6. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Phung My Chung whose telephone number is 703-305-9686. The examiner

can normally be reached on Monday-Friday from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Decady, Albert can be reached on (703) 305-9595. The fax phone number for the organization

where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-9000.

rimary Patent Examiner

Technology Center 2100